

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

1870
The first of the year
was a very dry one
and the crops were
very poor.
The second of the year
was a very wet one
and the crops were
very good.
The third of the year
was a very dry one
and the crops were
very poor.

United States Department of Agriculture,

OFFICE OF THE SECRETARY.—Circular No. 19.

STANDARDS OF PURITY FOR FOOD PRODUCTS.

Superseding Circulars Nos. 13 and 17.

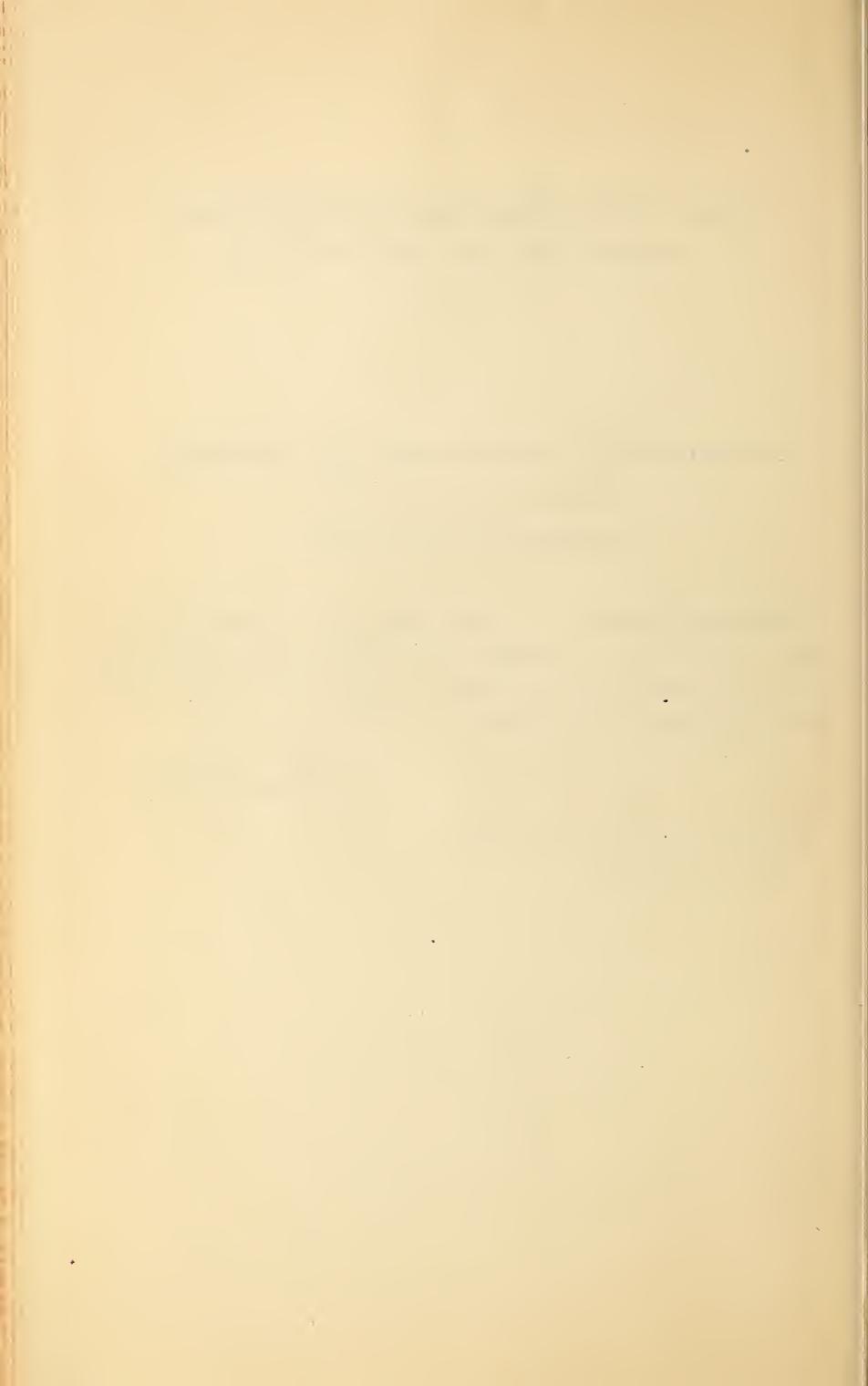
Supplemental Proclamation.

Referring to Circular No. 13 of this Office, dated December 20, 1904, and to Circular No. 17 of this Office, dated March 8, 1906, the following food standards are hereby established as superseding and supplemental to those proclaimed on the dates above named.

JAMES WILSON,
Secretary of Agriculture.

WASHINGTON, D. C., *June 26, 1906.*

1508—No. 19—06—1



LETTER OF SUBMITTAL.

The Honorable the SECRETARY OF AGRICULTURE.

SIR: The undersigned, representing the Association of Official Agricultural Chemists of the United States and the Interstate Food Commission, and commissioned by you, under authority given by the act of Congress approved March 3, 1903, to collaborate with you "to establish standards of purity for food products and to determine what are regarded as adulterations therein," respectfully report that they have carefully reviewed, in the light of recent investigations and correspondence, the standards earlier recommended by them and have prepared a set of amended schedules, in which certain changes have been introduced for the purpose of securing increased accuracy of expression and a more perfect correspondence of the chemical limits to the normal materials designated, and from which standards previously proclaimed for several manufactured articles have been omitted because of the unsatisfactory condition of trade nomenclature as applied thereto; and also additional schedules of standards for ice creams, vegetables and vegetable products, tea and coffee. They respectfully recommend that the standards herewith submitted be approved and proclaimed as the established standards, superseding and supplementing those established on December 20, 1904, and March 8, 1906.

The principles that have guided us in the formulation of these standards are appended hereto.

The several schedules of additional standards recommended have been submitted, in a tentative form, to the manufacturing firms and the trade immediately interested, and also to the State food-control officials for criticism.

Respectfully,

WILLIAM FREAR,
EDWARD H. JENKINS,
M. A. SCOVELL,
H. A. WEBER,
H. W. WILEY,

*Committee on Food Standards,
Association of Official Agricultural Chemists.*

RICHARD FISCHER,
Representing the Interstate Food Commission.

WASHINGTON, D. C., June 26, 1906.

PRINCIPLES ON WHICH THE STANDARDS ARE BASED.

The general considerations which have guided the committee in preparing the standards for food products are the following:

1. The standards are expressed in the form of definitions, with or without accompanying specifications of limit in composition.

2. The main classes of food articles are defined before the subordinate classes are considered.

3. The definitions are so framed as to exclude from the articles defined substances not included in the definitions.

4. The definitions include, where possible, those qualities which make the articles described wholesome for human food.

5. A term defined in any of the several schedules has the same meaning wherever else it is used in this report.

6. The names of food products herein defined usually agree with existing American trade or manufacturing usage; but where such usage is not clearly established or where trade names confuse two or more articles for which specific designations are desirable, preference is given to one of the several trade names applied.

7. Standards are based upon data representing materials produced under American conditions and manufactured by American processes or representing such varieties of foreign articles as are chiefly imported for American use.

8. The standards fixed are such that a departure of the articles to which they apply, above the maximum or below the minimum limit prescribed, is evidence that such articles are of inferior or abnormal quality.

9. The limits fixed as standard are not necessarily the extremes authentically recorded for the article in question, because such extremes are commonly due to abnormal conditions of production and are usually accompanied by marks of inferiority or abnormality readily perceived by the producer or manufacturer.

FOOD STANDARDS.

I. ANIMAL PRODUCTS.

A. MEATS AND THE PRINCIPAL MEAT PRODUCTS.

a. MEATS.

1. *Meat, flesh*, is any clean, sound, dressed, and properly prepared edible part of animals in good health at the time of slaughter, and if it bears a name descriptive of its kind, composition, or origin, it corresponds thereto. The term "animals", as herein used, includes not only mammals, but fish, fowl, crustaceans, mollusks, and all other animals used as food.

2. *Fresh meat* is meat from animals recently slaughtered and properly cooled until delivered to the consumer.

3. *Cold storage meat* is meat from animals recently slaughtered and preserved by refrigeration until delivered to the consumer.^a

4. *Salted, pickled, and smoked meats* are unmixd meats preserved by salt, sugar, vinegar, spices, or smoke, singly or in combination, whether in bulk or in suitable containers.^b

b. MANUFACTURED MEATS.

1. *Manufactured meats* are meats not included in paragraphs 2, 3, and 4, whether simple or mixed, whole or comminuted, in bulk or in suitable containers,^b with or without the addition of salt, sugar, vinegar, spices, smoke, oils, or rendered fat. If they bear names descriptive of kind, composition, or origin, they correspond thereto and when bearing such descriptive names, if force or flavoring meats are used, the kind and quantity thereof are made known.

C. MEAT EXTRACTS, MEAT PEPTONES, ETC.

(Schedule in preparation.)

d. LARD.

1. *Lard* is the rendered fresh fat from hogs in good health at the time of slaughter, is clean, free from rancidity, and contains, necessarily incorporated in the process of rendering, not more than one (1) per cent of substances, other than fatty acids and fat.

^aThe establishment of proper periods of time for cold storage is reserved for future consideration when the investigations on this subject, authorized by Congress, are completed

^bSuitable containers for keeping moist food products such as sirups, honey, condensed milk, soups, meat extracts, meats, manufactured meats and undried fruits and vegetables, and wrappers in contact with food products contain on their surfaces, in contact with the food product, no lead, antimony, arsenic, zinc or copper or any compounds thereof or any other poisonous or injurious substance. If the containers are made of tin plate they are outside-soldered and the plate in no place contains less than one hundred and thirteen (113) milligrams of tin on a piece five (5) centimeters square or one and eight-tenths (1.8) grains on a piece two (2) inches square.

The inner coating of the containers is free from pin holes, blisters, and cracks

If the tin plate is lacquered, the lacquer completely covers the tinned surface within the container and yields to the contents of the container no lead, antimony, arsenic, zinc or copper or any compounds thereof, or any other poisonous or injurious substance.

2. *Leaf lard* is lard rendered at moderately high temperatures from the internal fat of the abdomen of the hog, excluding that adherent to the intestines, and has an iodine number not greater than sixty (60).

3. *Neutral lard* is lard rendered at low temperatures.

B. MILK AND ITS PRODUCTS.

a. MILKS.

1. *Milk* is the fresh, clean, lacteal secretion obtained by the complete milking of one or more healthy cows, properly fed and kept, excluding that obtained within fifteen days before and ten days after calving, and contains not less than eight and one-half (8.5) per cent of solids not fat, and not less than three and one-quarter (3.25) per cent of milk fat.

2. *Blended milk* is milk modified in its composition so as to have a definite and stated percentage of one or more of its constituents.

3. *Skim milk* is milk from which a part or all of the cream has been removed and contains not less than nine and one-quarter (9.25) per cent of milk solids.

4. *Pasteurized milk* is milk that has been heated below boiling but sufficiently to kill most of the active organisms present and immediately cooled to 50° Fahr. or lower.

5. *Sterilized milk* is milk that has been heated at the temperature of boiling water or higher for a length of time sufficient to kill all organisms present.

6. *Condensed milk, evaporated milk*, is milk from which a considerable portion of water has been evaporated and contains not less than twenty-eight (28) per cent of milk solids of which not less than twenty-seven and five-tenths (27.5) per cent is milk fat.

7. *Sweetened condensed milk* is milk from which a considerable portion of water has been evaporated and to which sugar (sucrose) has been added, and contains not less than twenty-eight (28) per cent of milk solids, of which not less than twenty-seven and five-tenths (27.5) per cent is milk fat.

8. *Condensed skim milk* is skim milk from which a considerable portion of water has been evaporated.

9. *Buttermilk* is the product that remains when butter is removed from milk or cream in the process of churning.

10. *Goat's milk, ewe's milk, et cetera*, are the fresh, clean, lacteal secretions, free from colostrum, obtained by the complete milking of healthy animals other than cows, properly fed and kept, and conform in name to the species of animal from which they are obtained.

b. CREAM.

1. *Cream* is that portion of milk, rich in milk fat, which rises to the surface of milk on standing, or is separated from it by centrifugal force, is fresh and clean and contains not less than eighteen (18) per cent of milk fat.

2. *Evaporated cream, dotted cream*, is cream from which a considerable portion of water has been evaporated.

c. MILK FAT OR BUTTER FAT.

1. *Milk fat, butter fat*, is the fat of milk and has a Reichert-Meißl number not less than twenty-four (24) and a specific gravity not less than 0.905 $\left(\frac{40^{\circ} \text{C.}}{40^{\circ} \text{C.}}\right)$

d. BUTTER.

1. *Butter* is the clean, non-rancid product made by gathering in any manner the fat of fresh or ripened milk or cream into a mass, which also contains a small portion of the other milk constituents, with or without salt, and contains not less than

eighty-two and five-tenths (82.5) per cent of milk fat. By acts of Congress approved August 2, 1886, and May 9, 1902, butter may also contain added coloring matter.

2. *Renovated butter, process butter*, is the product made by melting butter and reworking, without the addition or use of chemicals or any substances except milk, cream, or salt, and contains not more than sixteen (16) per cent of water and at least eighty-two and five-tenths (82.5) per cent of milk fat.

e. CHEESE.

1. *Cheese* is the sound, solid, and ripened product made from milk or cream by coagulating the casein thereof with rennet or lactic acid, with or without the addition of ripening ferments and seasoning, and contains, in the water-free substance, not less than fifty (50) per cent of milk fat. By act of Congress, approved June 6, 1896, cheese may also contain added coloring matter.

2. *Skim milk cheese* is the sound, solid, and ripened product, made from skim milk by coagulating the casein thereof with rennet or lactic acid, with or without the addition of ripening ferments and seasoning.

3. *Goat's milk cheese, ewe's milk cheese, et cetera*, are the sound, ripened products made from the milks of the animals specified, by coagulating the casein thereof with rennet or lactic acid, with or without the addition of ripening ferments and seasoning.

f. ICE CREAMS.

1. *Ice cream* is a frozen product made from cream and sugar, with or without a natural flavoring, and contains not less than fourteen (14) per cent of milk fat.

2. *Fruit ice cream* is a frozen product made from cream, sugar, and sound, clean, mature fruits, and contains not less than twelve (12) per cent of milk fat.

3. *Nut ice cream* is a frozen product made from cream, sugar, and sound, nonrancid nuts, and contains not less than twelve (12) per cent of milk fat.

g. MISCELLANEOUS MILK PRODUCTS.

1. *Whey* is the product remaining after the removal of fat and casein from milk in the process of cheese-making.

2. *Kumiss* is the product made by the alcoholic fermentation of mare's or cow's milk.

II. VEGETABLE PRODUCTS.

A. GRAIN PRODUCTS.

a. GRAINS AND MEALS.

1. *Grain* is the fully matured, clean, sound, air-dry seed of wheat, maize, rice, oats, rye, buckwheat, barley, sorghum, millet, or spelt.

2. *Meal* is the clean, sound product made by grinding grain.

3. *Flour* is the fine, clean, sound product made by bolting wheat meal and contains not more than thirteen and one-half (13.5) per cent of moisture, not less than one and twenty-five hundredths (1.25) per cent of nitrogen, not more than one (1) per cent of ash, and not more than fifty hundredths (0.50) per cent of fiber.

4. *Graham flour* is unbolted wheat meal.

5. *Gluten flour* is the clean, sound product made from flour by the removal of starch and contains not less than five and six-tenths (5.6) per cent of nitrogen and not more than ten (10) per cent of moisture.

6. *Maize meal, corn meal, Indian corn meal*, is meal made from sound maize grain and contains not more than fourteen (14) per cent of moisture, not less than one and twelve hundredths (1.12) per cent of nitrogen, and not more than one and six-tenths (1.6) per cent of ash.

7. *Rice* is the hulled, or hulled and polished grain of *Oryza sativa*.

8. *Oatmeal* is meal made from hulled oats and contains not more than twelve (12) per cent of moisture, not more than one and five-tenths (1.5) per cent of crude fiber, not less than two and twenty-four hundredths (2.24) per cent of nitrogen, and not more than two and two-tenths (2.2) per cent of ash.

9. *Rye flour* is the fine, clean, sound product made by bolting rye meal and contains not more than thirteen and one-half (13.5) per cent of moisture, not less than one and thirty-six hundredths (1.36) per cent of nitrogen, and not more than one and twenty-five hundredths (1.25) per cent of ash.

10. *Buckwheat flour* is bolted buckwheat meal and contains not more than twelve (12) per cent of moisture, not less than one and twenty-eight hundredths (1.28) per cent of nitrogen, and not more than one and seventy-five hundredths (1.75) per cent of ash.

B. FRUIT AND VEGETABLES.

a. FRUIT AND FRUIT PRODUCTS.

(Except fruit juices, fresh, sweet, and fermented, and vinegars.)

1. *Fruits* are the clean, sound, edible, fleshy fructifications of plants, distinguished by their sweet, acid, and ethereal flavors.

2. *Dried fruit*^a is the clean, sound product made by drying mature, properly prepared, fresh fruit in such a way as to take up no harmful substance, and conforms in name to the fruit used in its preparation; *sun-dried fruit* is dried fruit made by drying without the use of artificial means; *evaporated fruit* is dried fruit made by drying with the use of artificial means.

3. *Evaporated apples* are evaporated fruit made from peeled and cored apples, and contain not more than twenty-seven (27) per cent of moisture determined by the usual commercial method of drying for four (4) hours at the temperature of boiling water.

(Standards for other dried fruits are in preparation.)

4. *Canned fruit* is the sound product made by sterilizing clean, sound, properly matured and prepared fresh fruit, by heating, with or without sugar (sucrose) and spices, and keeping in suitable, clean, hermetically sealed containers and conforms in name to the fruit used in its preparation.

5. *Preserve*^b is the sound product made from clean, sound, properly matured and prepared fresh fruit and sugar (sucrose) sirup, with or without spices or vinegar, and conforms in name to that of the fruit used, and in its preparation not less than forty-five (45) pounds of fruit are used to each fifty-five (55) pounds of sugar.

6. *Honey preserve*^b is preserve in which honey is used in place of sugar (sucrose) sirup.

7. *Glucose preserve*^b is preserve in which a glucose product is used in place of sugar (sucrose) sirup.

8. *Jam, marmalade*,^b is the sound product made from clean, sound, properly matured and prepared fresh fruit and sugar (sucrose), with or without spices or vinegar, by boiling to a pulpy or semisolid consistence, and conforms in name to the fruit used, and in its preparation not less than forty-five (45) pounds of fruit are used to each fifty-five (55) pounds of sugar.

9. *Glucose jam, glucose marmalade*,^b is jam in which a glucose product is used in place of sugar (sucrose).

^a The subject of sulphurous acid in dried fruits is reserved for consideration in connection with the schedule "Preservatives and Coloring Matters."

^b Products made with mixtures of sugar, glucose, and honey, or any two thereof, are reserved for future consideration.

10. *Fruit butter*^a is the sound product made from fruit juice and clean, sound, properly matured and prepared fruit, evaporated to a semisolid mass of homogeneous consistence, with or without the addition of sugar and spices or vinegar, and conforms in name to the fruit used in its preparation.

11. *Glucose fruit butter*^a is fruit butter in which a glucose product is used in place of sugar (sucrose).

12. *Jelly*^a is the sound, semisolid, gelatinous product made by boiling clean, sound, properly matured and prepared fresh fruit with water, concentrating the expressed and strained juice, to which sugar (sucrose) is added, and conforms in name to the fruit used in its preparation.

13. *Glucose jelly*^a is jelly in which a glucose product is used in place of sugar (sucrose).

b. VEGETABLES AND VEGETABLE PRODUCTS.

1. *Vegetables* are the succulent, clean, sound, edible parts of herbaceous plants used for culinary purposes.

2. *Dried vegetables* are the clean, sound products made by drying properly matured and prepared vegetables in such a way as to take up no harmful substance, and conform in name to the vegetables used in their preparation; *sun-dried vegetables* are dried vegetables made by drying without the use of artificial means; *evaporated vegetables* are dried vegetables made by drying with the use of artificial means.

3. *Canned vegetables* are sound, properly matured and prepared fresh vegetables, with or without salt, sterilized by heat, with or without previous cooking in vessels from which they take up no metallic substance, kept in suitable, clean, hermetically sealed containers, are sound and conform in name to the vegetables used in their preparation.

4. *Pickles* are clean, sound, immature cucumbers, properly prepared, without taking up any metallic compound other than salt, and preserved in any kind of vinegar, with or without spices; *pickled onions*, *pickled beets*, *pickled beans*, and other pickled vegetables are vegetables prepared as described above, and conform in name to the vegetables used.

5. *Salt pickles* are clean, sound, immature cucumbers, preserved in a solution of common salt, with or without spices.

6. *Sweet pickles* are pickled cucumbers or other vegetables in the preparation of which sugar (sucrose) is used.

7. *Sauerkraut* is clean, sound, properly prepared cabbage, mixed with salt, and subjected to fermentation.

8. *Catchup* (*ketchup*, *catsup*) is the clean, sound product made from the properly prepared pulp of clean, sound, fresh, ripe tomatoes, with spices and with or without sugar and vinegar; *mushroom catchup*, *walnut catchup*, *et cetera*, are catchups made as above described, and conform in name to the substances used in their preparation.

C. SUGARS AND RELATED SUBSTANCES.

a. SUGAR AND SUGAR PRODUCTS.

SUGARS.

1. *Sugar* is the product chemically known as sucrose (saccharose) chiefly obtained from sugar cane, sugar beets, sorghum, maple, and palm.

2. *Granulated*, *loaf*, *cut*, *milled*, and *powdered sugars* are different forms of sugar and contain at least ninety-nine and five-tenths (99.5) per cent of sucrose.

3. *Maple sugar* is the solid product resulting from the evaporation of maple sap, and contains, in the water-free substance, not less than sixty-five one-hundredths (0.65) per cent of maple sugar ash.

^aProducts made with mixtures of sugar, glucose, and honey, or any two thereof, are reserved for future consideration.

4. *Massecuite, melada, mush sugar, and concrete* are products made by evaporating the purified juice of a sugar-producing plant, or a solution of sugar, to a solid or semi-solid consistence, and in which the sugar chiefly exists in a crystalline state.

MOLASSES AND REFINERS' SIRUP.

1. *Molasses* is the product left after separating the sugar from *massecuite, melada, mush sugar, or concrete*, and contains not more than twenty-five (25) per cent of water and not more than five (5) per cent of ash.

2. *Refiners' sirup, treacle*, is the residual liquid product obtained in the process of refining raw sugars and contains not more than twenty-five (25) per cent of water and not more than eight (8) per cent of ash.

SIRUPS.

1. *Sirup* is the sound product made by purifying and evaporating the juice of a sugar-producing plant without removing any of the sugar.

2. *Sugar-cane sirup* is sirup made by the evaporation of the juice of the sugar-cane or by the solution of sugar-cane concrete, and contains not more than thirty (30) per cent of water and not more than two and five-tenths (2.5) per cent of ash.

3. *Sorghum sirup* is sirup made by the evaporation of sorghum juice or by the solution of sorghum concrete, and contains not more than thirty (30) per cent of water and not more than two and five-tenths (2.5) per cent of ash.

4. *Maple sirup* is sirup made by the evaporation of maple sap or by the solution of maple concrete, and contains not more than thirty-two (32) per cent of water and not less than forty-five hundredths (0.45) per cent of maple sirup ash.

5. *Sugar sirup* is the product made by dissolving sugar to the consistence of a sirup and contains not more than thirty-five (35) per cent of water.

b. GLUCOSE PRODUCTS.

1. *Starch sugar* is the solid product made by hydrolyzing starch or a starch-containing substance until the greater part of the starch is converted into dextrose. Starch sugar appears in commerce in two forms, anhydrous starch sugar and hydrous starch sugar. The former, crystallized without water of crystallization, contains not less than ninety-five (95) per cent of dextrose and not more than eight-tenths (0.8) per cent of ash. The latter, crystallized with water of crystallization, is of two varieties—70 sugar, also known as brewers' sugar, contains not less than seventy (70) per cent of dextrose and not more than eight-tenths (0.8) per cent of ash; 80 sugar, climax or acme sugar, contains not less than eighty (80) per cent of dextrose and not more than one and one-half (1.5) per cent of ash.

The ash of all these products consists almost entirely of chlorids and sulphates.

2. *Glucose, mixing glucose, confectioner's glucose*, is a thick, sirupy, colorless product made by incompletely hydrolyzing starch, or a starch-containing substance, and decolorizing and evaporating the product. It varies in density from forty-one (41) to forty-five (45) degrees Baumé at a temperature of 100° Fahr. (37.7° C.), and conforms in density, within these limits, to the degree Baumé it is claimed to show, and for a density of forty-one (41) degrees Baumé contains not more than twenty-one (21) per cent and for a density of forty-five (45) degrees not more than fourteen (14) per cent of water. It contains on a basis of forty-one (41) degrees Baumé not more than one (1) per cent of ash, consisting chiefly of chlorids and sulphates.

c. CANDY.

1. *Candy* is a product made from a saccharine substance or substances with or without the addition of harmless coloring, flavoring, or filling materials and contains no

terra alba, barytes, talc, chrome yellow, or other mineral substances, or poisonous colors or flavors, or other ingredients deleterious or detrimental to health, or any vinous, malt, or spirituous liquor or compound, or narcotic drug.

d. HONEY.

1. *Honey* is the nectar and saccharine exudations of plants gathered, modified, and stored in the comb by honey bees (*Apis mellifica* and *A. dorsata*); is lævo-rotatory, contains not more than twenty-five (25) per cent of water, not more than twenty-five hundredths (0.25) per cent of ash, and not more than eight (8) per cent of sucrose.

2. *Comb honey* is honey contained in the cells of comb.

3. *Extracted honey* is honey which has been separated from the uncrushed comb by centrifugal force or gravity.

4. *Strained honey* is honey removed from the crushed comb by straining or other means.

D. CONDIMENTS (EXCEPT VINEGAR AND SALT).

a. SPICES.

1. *Spices* are aromatic vegetable substances used for the seasoning of food and from which no portion of any volatile oil or other flavoring principle has been removed and which are clean, sound, and true to name.

2. *Allspice, pimento*, is the dried fruit of the *Pimenta pimenta* (L.) Karst., and contains not less than eight (8) per cent of quercitannic acid^a; not more than six (6) per cent of total ash, not more than five-tenths (0.5) per cent of ash insoluble in hydrochloric acid, and not more than twenty-five (25) per cent of crude fiber.

3. *Anise* is the fruit of the *Pimpinella anisum* L.

4. *Bay leaf* is the dried leaf of *Laurus nobilis* L.

5. *Capers* are the flower buds of *Capparis spinosa* L.

6. *Caraway* is the fruit of *Carum carvi* L.

CAYENNE AND RED PEPPERS.

7. *Red pepper* is the red, dried, ripe fruit of any species of *Capsicum*.

8. *Cayenne pepper, cayenne*, is the dried ripe fruit of *Capsicum frutescens* L., *Capsicum baccatum* L., or some other small-fruited species of *Capsicum*, and contains not less than fifteen (15) per cent of nonvolatile ether extract; not more than six and five-tenths (6.5) per cent of total ash; not more than five-tenths (0.5) per cent of ash insoluble in hydrochloric acid; not more than one and five-tenths (1.5) per cent of starch, and not more than twenty-eight (28) per cent of crude fiber.

9. *Paprika* is the dried ripe fruit of *Capsicum annuum* L., or some other large-fruited species of *Capsicum*, excluding seeds and stems.

10. *Celery seed* is the dried fruit of *Apium graveolens* L.

11. *Cinnamon* is the dried bark of any species of the genus *Cinnamomum* from which the outer layers may or may not have been removed.

12. *True cinnamon* is the dried inner bark of *Cinnamomum zeylanicum* Breyne.

13. *Cassia* is the dried bark of various species of *Cinnamomum*, other than *Cinnamomum zeylanicum*, from which the outer layers may or may not have been removed.

14. *Cassia buds* are the dried immature fruit of species of *Cinnamomum*.

15. *Ground cinnamon, ground cassia*, is a powder consisting of cinnamon, cassia, or cassia buds, or a mixture of these spices and contains not more than six (6) per cent of total ash and not more than two (2) per cent of sand.

^a Calculated from the total oxygen absorbed by the aqueous extract.

16. *Cloves* are the dried flower buds of *Caryophyllus aromaticus* L., which contain not more than five (5) per cent of clove stems; not less than ten (10) per cent of volatile ether extract; not less than twelve (12) per cent of quercitannic acid^a; not more than eight (8) per cent of total ash; not more than five-tenths (0.5) per cent of ash insoluble in hydrochloric acid, and not more than ten (10) per cent of crude fiber.

17. *Coriander* is the dried fruit of *Coriandrum sativum* L.

18. *Cumin seed* is the fruit of *Cuminum cyminum* L.

19. *Dill seed* is the fruit of *Anethum graveolens* L.

20. *Fennel* is the fruit of *Foeniculum foeniculum* (L.) Karst.

21. *Ginger* is the washed and dried or decorticated and dried rhizome of *Zinziber zingiber* (L.) Karst., and contains not less than forty-two (42) per cent of starch; not more than eight (8) per cent of crude fiber, not more than six (6) per cent of total ash, not more than one (1) per cent of lime, and not more than three (3) per cent of ash insoluble in hydrochloric acid.

22. *Limed ginger, bleached ginger*, is whole ginger coated with carbonate of lime and contains not more than ten (10) per cent of ash, not more than four (4) per cent of carbonate of lime, and conforms in other respects to the standard for ginger.

23. *Horse-radish* is the root of *Roripa armoracia* (L.) Hitchcock, either by itself or ground and mixed with vinegar.

24. *Mace* is the dried arillus of *Myristica fragrans* Houttuyn, and contains not less than twenty (20) nor more than thirty (30) per cent of nonvolatile ether extract, not more than three (3) per cent of total ash, and not more than five-tenths (0.5) per cent of ash insoluble in hydrochloric acid, and not more than ten (10) per cent of crude fiber.

25. *Macassar mace, Papua mace*, is the dried arillus of *Myristica argentea* Warb.

26. *Bombay mace* is the dried arillus of *Myristica malabarica* Lamarck.

27. *Marjoram* is the leaf, flower and branch of *Majorana majorana* (L.) Karst.

28. *Mustard seed* is the seed of *Sinapis alba* L. (white mustard), *Brassica nigra* (L.) Koch (black mustard), or *Brassica juncea* (L.) Cosson (black or brown mustard).

29. *Ground mustard* is a powder made from mustard seed, with or without the removal of the hulls and a portion of the fixed oil, and contains not more than two and five-tenths (2.5) per cent of starch and not more than eight (8) per cent of total ash.

30. *Prepared mustard, German mustard, French mustard, mustard paste*, is a paste composed of a mixture of ground mustard seed or mustard flour with salt, spices and vinegar, and, calculated free from water, fat and salt, contains not more than twenty-four (24) per cent of carbohydrates, calculated as starch, determined according to the official methods, not more than twelve (12) per cent of crude fiber nor less than thirty-five (35) per cent of protein, derived solely from the materials named.

31. *Nutmeg* is the dried seed of the *Myristica fragrans* Houttuyn, deprived of its testa, with or without a thin coating of lime, and contains not less than twenty-five (25) per cent of nonvolatile ether extract, not more than five (5) per cent of total ash, not more than five-tenths (0.5) per cent of ash insoluble in hydrochloric acid, and not more than ten (10) per cent of crude fiber.

32. *Macassar nutmeg, Papua nutmeg, male nutmeg, long nutmeg*, is the dried seed of *Myristica argentea* Warb. deprived of its testa.

PEPPER.

33. *Black pepper* is the dried immature berry of *Piper nigrum* L. and contains not less than six (6) per cent of nonvolatile ether extract, not less than twenty-five (25) per cent of starch, not more than seven (7) per cent of total ash, not more than two

^a Calculated from the total oxygen absorbed by the aqueous extract.

(2) per cent of ash insoluble in hydrochloric acid, and not more than fifteen (15) per cent of crude fiber. One hundred parts of the nonvolatile ether extract contain not less than three and one-quarter (3.25) parts of nitrogen. *Ground black pepper* is the product made by grinding the entire berry and contains the several parts of the berry in their normal proportions.

34. *Long pepper* is the dried fruit of *Piper longum* L.

35. *White pepper* is the dried mature berry of *Piper nigrum* L. from which the outer coating or the outer and inner coatings have been removed and contains not less than six (6) per cent of nonvolatile ether extract, not less than fifty (50) per cent of starch, not more than four (4) per cent of total ash, not more than five-tenths (0.5) per cent of ash insoluble in hydrochloric acid, and not more than five (5) per cent of crude fiber. One hundred parts of the nonvolatile ether extract contain not less than four (4) parts of nitrogen.

36. *Saffron* is the dried stigma of *Crocus sativus* L.

37. *Sage* is the leaf of *Salvia officinalis* L.

38. *Savory, summer savory*, is the leaf, blossom, and branch of *Satureja hortensis* L.

39. *Thyme* is the leaf and tip of blooming branches of *Thymus vulgaris* L.

b. FLAVORING EXTRACTS.

1. *A flavoring extract*^a is a solution in ethyl alcohol of proper strength of the sapid and odorous principles derived from an aromatic plant, or parts of the plant, with or without its coloring matter, and conforms in name to the plant used in its preparation.

2. *Almond extract* is the flavoring extract prepared from oil of bitter almonds, free from hydrocyanic acid, and contains not less than one (1) per cent by volume of oil of bitter almonds.

2a. *Oil of bitter almonds*, commercial, is the volatile oil obtained from the seed of the bitter almond (*Amygdalus communis* L.), the apricot (*Prunus armeniaca* L.), or the peach (*Amygdalus persica* L.).

3. *Anise extract* is the flavoring extract prepared from oil of anise, and contains not less than three (3) per cent by volume of oil of anise.

3a. *Oil of anise* is the volatile oil obtained from the anise seed.

4. *Celery seed extract* is the flavoring extract prepared from celery seed or the oil of celery seed, or both, and contains not less than three-tenths (0.3) per cent by volume of oil of celery seed.

4a. *Oil of celery seed* is the volatile oil obtained from celery seed.

5. *Cassia extract* is the flavoring extract prepared from oil of cassia and contains not less than two (2) per cent by volume of oil of cassia.

5a. *Oil of cassia* is the lead-free volatile oil obtained from the leaves or bark of *Cinnamomum cassia* Bl., and contains not less than seventy-five (75) per cent by weight of cinnamic aldehyde.

6. *Cinnamon extract* is the flavoring extract prepared from oil of cinnamon, and contains not less than two (2) per cent by volume of oil of cinnamon.

6a. *Oil of cinnamon* is the lead-free volatile oil obtained from the bark of the Ceylon cinnamon (*Cinnamomum zeylanicum* Breyne), and contains not less than sixty-five (65) per cent by weight of cinnamic aldehyde and not more than ten (10) per cent by weight of eugenol.

7. *Clove extract* is the flavoring extract prepared from oil of cloves, and contains not less than two (2) per cent by volume of oil of cloves.

7a. *Oil of cloves* is the lead-free, volatile oil obtained from cloves.

^a The flavoring extracts herein described are intended solely for food purposes and are not to be confounded with similar preparations described in the Pharmacopœia for medicinal purposes.

8. *Ginger extract* is the flavoring extract prepared from ginger and contains in each one hundred (100) cubic centimeters, the alcohol-soluble matters from not less than twenty (20) grams of ginger.

9. *Lemon extract* is the flavoring extract prepared from oil of lemon, or from lemon peel, or both, and contains not less than five (5) per cent by volume of oil of lemon.

9a. *Oil of lemon* is the volatile oil obtained, by expression or alcoholic solution, from the fresh peel of the lemon (*Citrus limonum* L.), has an optical rotation (25° C.) of not less than +60° in a 100-millimeter tube, and contains not less than four (4) per cent by weight of citral.

10. *Terpeneless extract of lemon* is the flavoring extract prepared by shaking oil of lemon with dilute alcohol, or by dissolving terpeneless oil of lemon in dilute alcohol, and contains not less than two-tenths (0.2) per cent by weight of citral derived from oil of lemon.

10a. *Terpeneless oil of lemon* is oil of lemon from which all or nearly all of the terpenes have been removed.

11. *Nutmeg extract* is the flavoring extract prepared from oil of nutmeg, and contains not less than two (2) per cent by volume of oil of nutmeg.

11a. *Oil of nutmeg* is the volatile oil obtained from nutmegs.

12. *Orange extract* is the flavoring extract prepared from oil of orange, or from orange peel, or both, and contains not less than five (5) per cent by volume of oil of orange.

12a. *Oil of orange* is the volatile oil obtained, by expression or alcoholic solution, from the fresh peel of the orange (*Citrus aurantium* L.) and has an optical rotation (25° C.) of not less than +95° in a 100-millimeter tube.

13. *Terpeneless extract of orange* is the flavoring extract prepared by shaking oil of orange with dilute alcohol, or by dissolving terpeneless oil of orange in dilute alcohol, and corresponds in flavoring strength to orange extract.

13a. *Terpeneless oil of orange* is oil of orange from which all or nearly all of the terpenes have been removed.

14. *Peppermint extract* is the flavoring extract prepared from oil of peppermint, or from peppermint, or both, and contains not less than three (3) per cent by volume of oil of peppermint.

14a. *Peppermint* is the leaves and flowering tops of *Mentha piperita* L.

14b. *Oil of peppermint* is the volatile oil obtained from peppermint and contains not less fifty (50) per cent by weight of menthol.

15. *Rose extract* is the flavoring extract prepared from otto of roses, with or without red rose petals, and contains not less than four-tenths (0.4) per cent by volume of otto of roses.

15a. *Otto of roses* is the volatile oil obtained from the petals of *Rosa damascena* Mill., *R. centifolia* L., or *R. moschata* Herrm.

16. *Savory extract* is the flavoring extract prepared from oil of savory, or from savory, or both, and contains not less than thirty-five hundredths (0.35) per cent by volume of oil of savory.

16a. *Oil of savory* is the volatile oil obtained from savory.

17. *Spearmint extract* is the flavoring extract prepared from oil of spearmint, or from spearmint, or both, and contains not less than three (3) per cent by volume of oil of spearmint.

17a. *Spearmint* is the leaves and flowering tops of *Mentha spicata* L.

17b. *Oil of spearmint* is the volatile oil obtained from spearmint.

18. *Star anise extract* is the flavoring extract prepared from oil of star anise, and contains not less than three (3) per cent by volume of oil of star anise.

18a. *Oil of star anise* is the volatile oil distilled from the fruit of the star anise (*Illicium verum* Hook).

19. *Sweet basil extract* is the flavoring extract prepared from oil of sweet basil, or from sweet basil, or both, and contains not less than one-tenth (0.1) per cent by volume of oil of sweet basil.

19a. *Sweet basil, basil*, is the leaves and tops of *Ocimum basilicum* L.

19b. *Oil of sweet basil* is the volatile oil obtained from basil.

20. *Sweet marjoram extract, marjoram extract*, is the flavoring extract prepared from the oil of marjoram, or from marjoram, or both, and contains not less than one (1) per cent by volume of oil of marjoram.

20a. *Oil of marjoram* is the volatile oil obtained from marjoram.

21. *Thyme extract* is the flavoring extract prepared from oil of thyme, or from thyme, or both, and contains not less than two-tenths (0.2) per cent by volume of oil of thyme.

21a. *Oil of thyme* is the volatile oil obtained from thyme.

22. *Tonka extract* is the flavoring extract prepared from tonka bean, with or without sugar or glycerin, and contains not less than one-tenth (0.1) per cent by weight of coumarin extracted from the tonka bean, together with a corresponding proportion of the other soluble matters thereof.

22a. *Tonka bean* is the seed of *Coumarouna odorata* Aublet (*Dipteryx odorata* (Aubl.) Willd.).

23. *Vanilla extract* is the flavoring extract prepared from vanilla bean, with or without sugar or glycerin, and contains in one hundred (100) cubic centimeters the soluble matters from not less than ten (10) grams of the vanilla bean.

23a. *Vanilla bean* is the dried, cured fruit of *Vanilla planifolia* Andrews.

24. *Wintergreen extract* is the flavoring extract prepared from oil of wintergreen, and contains not less than three (3) per cent by volume of oil of wintergreen.

24a. *Oil of wintergreen* is the volatile oil distilled from the leaves of the *Gaultheria procumbens* L.

C. EDIBLE VEGETABLE OILS AND FATS.

1. *Olive oil* is the oil obtained from the sound, mature fruit of the cultivated olive tree (*Olea europaea* L.) and subjected to the usual refining processes; is free from rancidity; has a refractive index (25° C.) not less than one and forty-six hundred and sixty ten-thousandths (1.4660) and not exceeding one and forty-six hundred and eighty ten-thousandths (1.4680); and an iodine number not less than seventy-nine (79) and not exceeding ninety (90).

2. *Virgin olive oil* is olive oil obtained from the first pressing of carefully selected, hand-picked olives.

3. *Cotton-seed oil* is the oil obtained from the seeds of cotton plants (*Gossypium hirsutum* L., *G. barbadense* L., or *G. herbaceum* L.) and subjected to the usual refining processes; is free from rancidity; has a refractive index (25° C.) not less than one and forty-seven hundred ten-thousandths (1.4700) and not exceeding one and forty-seven hundred and twenty-five ten-thousandths (1.4725); and an iodine number not less than one hundred and four (104) and not exceeding one hundred and ten (110).

4. "*Winter-yellow*" *cotton-seed oil* is expressed cotton-seed oil from which a portion of the stearin has been separated by chilling and pressure, and has an iodine number not less than one hundred and ten (110) and not exceeding one hundred and sixteen (116).

5. *Peanut oil, arachis oil, earthnut oil*, is the oil obtained from the peanut (*Arachis hypogaea* L.) and subjected to the usual refining processes; is free from rancidity; has a refractive index (25° C.) not less than one and forty-six hundred and ninety ten-thousandths (1.4690) and not exceeding one and forty-seven hundred and seven ten thousandths (1.4707); and an iodine number not less than eighty-seven (87) and not exceeding one hundred (100).

6. "Cold-drawn" peanut oil^a is peanut oil obtained by pressure without heating.

7. Sesame oil, gingili oil, teel oil, is the oil obtained from the seeds of the sesame plants (*Sesamum orientale* L. and *S. radiatum* Schum. and Thonn.) and subjected to the usual refining processes; is free from rancidity; has a refractive index (25° C.) not less than one and forty-seven hundred and four ten-thousandths (1.4704) and not exceeding one and forty-seven hundred and seventeen ten-thousandths (1.4717); and an iodine number not less than one hundred and three (103) and not exceeding one hundred and twelve (112).

8. "Cold-drawn" sesame oil^a is sesame oil obtained by pressure without heating.

9. Poppy-seed oil^a is the oil obtained from the seed of the poppy (*Papaver somniferum* L.) subjected to the usual refining processes and free from rancidity.

10. White poppy-seed oil, "cold-drawn" poppy-seed oil,^a is poppy-seed oil of the first pressing without heating.

11. Coconut oil^a is the oil obtained from the kernels of the coconut (*Cocos nucifera* L.) and subjected to the usual refining processes and free from rancidity.

12. Cochin oil is coconut oil prepared in Cochin (Malabar).

13. Ceylon oil is coconut oil prepared in Ceylon.

14. Copra oil is coconut oil prepared from copra, the dried kernels of the coconut.

15. Rape-seed oil, colza oil,^a is the oil obtained from the seeds of the rape plant (*Brassica napus* L.) and subjected to the usual refining processes and free from rancidity.

16. "Cold-drawn" rape-seed oil^a is rape-seed oil obtained by the first pressing without heating.

17. Sunflower oil^a is the oil obtained from the seeds of the sunflower (*Helianthus annuus* L.) and subjected to the usual refining processes and free from rancidity.

18. "Cold-drawn" sunflower oil^a is sunflower oil obtained by the first pressing without heating.

19. Maize oil, corn oil,^a is the oil obtained from the germ of the maize (*Zea mays* L.) and subjected to the usual refining processes and free from rancidity.

20. Cocoa butter, cacao butter, is the fat obtained from roasted, sound cocoa beans, and subjected to the usual refining processes; is free from rancidity; has a refractive index (40° C.) not less than one and forty-five hundred and sixty six ten-thousandths (1.4566) and not exceeding one and forty-five hundred and ninety-eight ten-thousandths (1.4598); an iodine number not less than thirty-three (33) and not exceeding thirty-eight (38); and a melting point not lower than 30° C. nor higher than 35° C.

21. Cotton-seed oil stearin is the solid product made by chilling cotton-seed oil and separating the solid portion by filtration, with or without pressure, and having an iodine number not less than eighty-five (85) and not more than one hundred (100).

E. TEA, COFFEE, AND COCOA PRODUCTS.

a. TEA.

1. Tea is the leaves and leaf buds of different species of *Thea*, prepared by the usual trade processes of fermenting, drying, and firing; meets the provisions of the act of Congress approved March 2, 1897, and the regulations made in conformity therewith (Treasury Department Circular 16, February 6, 1905); conforms in variety and place of production to the name it bears; and contains not less than four (4) nor more than seven (7) per cent of ash.

^a The fixing of limits for chemical and physical properties is reserved for future consideration.

b. COFFEE.

1. *Coffee* is the seed of *Coffea arabica* L. or *Coffea liberica* Bull., freed from all but a small portion of its spermoderm, and conforms in variety and place of production to the name it bears.

2. *Roasted coffee* is coffee which by the action of heat has become brown and developed its characteristic aroma, and contains not less than ten (10) per cent of fat and not less than three (3) per cent of ash.

c. COCOA AND COCOA PRODUCTS.

1. *Cocoa beans* are the seeds of the cacao tree, *Theobroma cacao* L.

2. *Cocoa nibs, cracked cocoa*, is the roasted, broken cocoa bean freed from its shell or husk.

3. *Chocolate, plain chocolate, bitter chocolate, chocolate liquor, bitter chocolate coatings*, is the solid or plastic mass obtained by grinding cocoa nibs without the removal of fat or other constituents except the germ, and contains not more than three (3) per cent of ash insoluble in water, three and fifty hundredths (3.50) per cent of crude fiber, and nine (9) per cent of starch, and not less than forty-five (45) per cent of cocoa fat.

4. *Sweet chocolate, sweet chocolate coatings*, is chocolate mixed with sugar (sucrose), with or without the addition of cocoa butter, spices, or other flavoring materials, and contains in the sugar- and fat-free residue no higher percentage of either ash, fiber, or starch than is found in the sugar- and fat-free residue of chocolate.

5. *Cocoa, powdered cocoa*, is cocoa nibs, with or without the germ, deprived of a portion of its fat and finely pulverized, and contains percentages of ash, crude fiber, and starch corresponding to those in chocolate after correction for fat removed.

6. *Sweet cocoa, sweetened cocoa*, is cocoa mixed with sugar (sucrose), and contains not more than sixty (60) per cent of sugar (sucrose), and in the sugar- and fat-free residue no higher percentage of either ash, crude fiber, or starch than is found in the sugar- and fat-free residue of chocolate.

F. BEVERAGES.

a. FRUIT JUICES—FRESH, SWEET, AND FERMENTED.

1. FRESH AND 2. SWEET.

(Schedules in preparation.)

3. FERMENTED FRUIT JUICES.

1. *Wine* is the product made by the normal alcoholic fermentation of the juice of sound, ripe grapes, and the usual cellar treatment,^a and contains not less than seven (7) nor more than sixteen (16) percent of alcohol, by volume, and, in one hundred (100) cubic centimeters (20° C.), not more than one-tenth (0.1) gram of sodium chlorid nor more than two-tenths (0.2) gram of potassium sulphate; and for red wine not more than fourteen hundredths (0.14) gram, and for white wine not more than twelve hundredths (0.12) gram of volatile acids produced by fermentation and calculated as acetic acid. *Red wine* is wine containing the red coloring matter of the skins of grapes. *White wine* is wine made from white grapes or the expressed fresh juice of other grapes.

2. *Dry wine* is wine in which the fermentation of the sugars is practically complete and which contains, in one hundred (100) cubic centimeters (20° C.), less than one (1) gram of sugars and for dry red wine not less than sixteen hundredths (0.16) gram of grape ash and not less than one and six-tenths (1.6) grams of sugar-free grape solids.

^aThe subject of sulphurous acid in wine is reserved for consideration in connection with the schedule, "Preservatives and Coloring Matters."

and for dry white wine not less than thirteen hundredths (0.13) gram of grape ash and not less than one and four-tenths (1.4) grams of sugar-free grape solids.

3. *Fortified dry wine* is dry wine to which brandy has been added but which conforms in all other particulars to the standard of dry wine.

4. *Sweet wine* is wine in which the alcoholic fermentation has been arrested, and which contains, in one hundred (100) cubic centimeters (20° C.), not less than one (1) gram of sugars, and for sweet red wine not less than sixteen hundredths (0.16) gram of grape ash, and for sweet white wine not less than thirteen hundredths (0.13) gram of grape ash.

5. *Fortified sweet wine* is sweet wine to which wine spirits have been added. By act of Congress, "sweet wine" used for making fortified sweet wine and "wine spirits" used for such fortification are defined as follows (sec. 43, Act of October 1, 1890, 26 Stat., 567, as amended by section 68, Act of August 27, 1894, 28 Stat., 509, and further amended by Act of Congress approved June 7, 1906): "That the wine spirits mentioned in section 42 of this act is the product resulting from the distillation of fermented grape juice to which water may have been added prior to, during, or after fermentation, for the sole purpose of facilitating the fermentation and economical distillation thereof, and shall be held to include the products from grapes or their residues, commonly known as grape brandy; and the pure sweet wine, which may be fortified free of tax, as provided in said section, is fermented grape juice only, and shall contain no other substance whatever introduced before, at the time of, or after fermentation, except as herein expressly provided; and such sweet wine shall contain not less than four per centum of saccharine matter, which saccharine strength may be determined by testing with Balling's saccharometer or must scale, such sweet wine, after the evaporation of the spirits contained therein, and restoring the sample tested to original volume by addition of water: *Provided*, That the addition of pure boiled or condensed grape must or pure crystallized cane or beet sugar or pure anhydrous sugar to the pure grape juice aforesaid, or the fermented product of such grape juice prior to the fortification provided by this Act for the sole purpose of perfecting sweet wine according to commercial standard, or the addition of water in such quantities only as may be necessary in the mechanical operation of grape conveyers, crushers, and pipes leading to fermenting tanks, shall not be excluded by the definition of pure sweet wine aforesaid: *Provided, however*, That the cane or beet sugar, or pure anhydrous sugar, or water, so used shall not in either case be in excess of ten (10) per centum of the weight of the wine to be fortified under this Act: *And provided further*, That the addition of water herein authorized shall be under such regulations and limitations as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, may from time to time prescribe; but in no case shall such wines to which water has been added be eligible for fortification under the provisions of this Act where the same, after fermentation and before fortification, have an alcoholic strength of less than five per centum of their volume."

6. *Sparkling wine* is wine in which the after part of the fermentation is completed in the bottle, the sediment being disgorged and its place supplied by wine or sugar liquor, and which contains, in one hundred (100) cubic centimeters (20° C.), not less than twelve hundredths (0.12) gram of grape ash.

7. *Modified wine, ameliorated wine, corrected wine*, is the product made by the alcoholic fermentation, with the usual cellar treatment, of a mixture of the juice of sound, ripe grapes with sugar (sucrose), or a sirup containing not less than sixty-five (65) per cent of sugar (sucrose), and in quantity not more than enough to raise the alcoholic strength after fermentation, to eleven (11) per cent by volume.

8. *Raisin wine* is the product made by the alcoholic fermentation of an infusion of dried or evaporated grapes, or of a mixture of such infusion or of raisins with grape juice.

b. MEAD, ROOT BEER, ETC.

(Schedule in preparation.)

c. MALT LIQUORS.

(Schedule in preparation.)

d. SPIRITUOUS LIQUORS.

(Schedule in preparation.)

e. CARBONATED WATERS, ETC.

(Schedule in preparation.)

G. VINEGAR.

1. *Vinegar, cider vinegar, apple vinegar*, is the product made by the alcoholic and subsequent acetous fermentations of the juice of apples, is lævo-rotatory, and contains not less than four (4) grams of acetic acid, not less than one and six-tenths (1.6) grams of apple solids, of which not more than fifty (50) per cent are reducing sugars, and not less than twenty-five hundredths (0.25) gram of apple ash in one hundred (100) cubic centimeters (20° C.); and the water-soluble ash from one hundred (100) cubic centimeters (20° C.) of the vinegar contains not less than ten (10) milligrams of phosphoric acid (P_2O_5), and requires not less than thirty (30) cubic centimeters of decinormal acid to neutralize its alkalinity.

2. *Wine vinegar, grape vinegar*, is the product made by the alcoholic and subsequent acetous fermentations of the juice of grapes and contains, in one hundred (100) cubic centimeters (20° C.), not less than four (4) grams of acetic acid, not less than one (1.0) gram of grape solids, and not less than thirteen hundredths (0.13) gram of grape ash.

3. *Malt vinegar* is the product made by the alcoholic and subsequent acetous fermentations, without distillation, of an infusion of barley malt or cereals whose starch has been converted by malt, is dextro-rotatory, and contains, in one hundred (100) cubic centimeters (20° C.), not less than four (4) grams of acetic acid, not less than two (2) grams of solids, and not less than two-tenths (0.2) gram of ash; and the water-soluble ash from one hundred (100) cubic centimeters (20° C.) of the vinegar contains not less than nine (9) milligrams of phosphoric acid (P_2O_5), and requires not less than four (4) cubic centimeters of decinormal acid to neutralize its alkalinity.

4. *Sugar vinegar* is the product made by the alcoholic and subsequent acetous fermentations of solutions of sugar, sirup, molasses, or refiners' sirup, and contains, in one hundred (100) cubic centimeters (20° C.), not less than four (4) grams of acetic acid.

5. *Glucose vinegar* is the product made by the alcoholic and subsequent acetous fermentations of solutions of starch sugar or glucose, is dextro-rotatory, and contains, in one hundred (100) cubic centimeters (20° C.), not less than four (4) grams of acetic acid.

6. *Spirit vinegar, distilled vinegar, grain vinegar*, is the product made by the acetous fermentation of dilute distilled alcohol, and contains, in one hundred (100) cubic centimeters (20° C.), not less than four (4) grams of acetic acid.

III. SALT.

1. *Table salt, dairy salt*, is fine-grained crystalline salt containing on a water-free basis, not more than one and four-tenths (1.4) per cent of calcium sulphate ($CaSO_4$), nor more than five-tenths (0.5) per cent of calcium and magnesium chlorids ($CaCl_2$ and $MgCl_2$), nor more than one-tenth (0.1) per cent of matters insoluble in water.

IV. PRESERVATIVES AND COLORING MATTERS.

(Schedules in preparation.)

